=> dis hist

| | (FILE | 'USPAT | r' ENTE | RED AT 14:36:14 ON 20 JUL 1998) |
|----|-------|---------|----------|--|
| | | Ι | DEL HIST | T |
| L1 | | 4217 \$ | CONTRO | OLLER AND MOLD? AND PRESSURE AND TEMPERATURE |
| L2 | | 1920 \$ | L1 ANI | ID INJECT? |
| L3 | | 1201 5 | L2 ANI | ID MANUFACTUR? |
| L4 | | 562 \$ | L3 ANI | D MONITOR? |
| L5 | | 121 \$ | L4 ANI | ID TOOL? |
| L6 | | 98 5 | L5 ANI | ID MEASURE? |
| L7 | | 72 5 | L6 ANI | D QUALITY |
| L8 | | 24 9 | L7 ANI | D TOOLING |
| L9 | | 4 5 | L8 ANI | D CONTROL SIGNAL |

=> dis cit,fd

1. 5,304,341, Apr. 19, 1994, **Injection molding** apparatus and method having in-cavity control of plastics and gas flow rates; Suresh D. Shah, 264/572; 425/130 [IMAGE AVAILABLE]

US PAT NO: 5,304,341 [IMAGE AVAILABLE] L13: 1 of 1

DATE FILED: Dec. 14, 1992

=> dis hist

(FILE 'USPAT' ENTERED AT 13:05:24 ON 20 JUL 1998)

```
FILE 'USPAT' ENTERED AT 13:05:38 ON 20 JUL 1998
L1
             1 S 5342191/PN
L2
              0 S L1 AND SOLID?
L3
             1 S 5728410/PN
L4
             1 S L3 AND SOLID?
L5
             1 S L3 AND CHANNEL?
             1 S L3 AND (PATH? OR PASSAG?) AND CHANNEL?
L6
             1 S L3 AND SOLID?
L7
         85577 S FLOW? (P) ACTUAT?
rs
          9869 S L8 AND MOLD?
L9
L10
          3122 S L9 AND CHANNEL?
          1273 S L10 AND INJECT?
L11
           67 S L11 AND TOOLING
L12
L13
             1 S L12 AND SHORT SHOT?
```

=> s mold? and tool? and inlet and channel? and cavit? flow?

304907 MOLD? 220212 TOOL? 287058 INLET 383737 CHANNEL? 222286 CAVIT? 920436 FLOW?

372 CAVIT? FLOW? (CAVIT?(W)FLOW?)

L1 5 MOLD? AND TOOL? AND INLET AND CHANNEL? AND CAVIT? FLOW?

=>

=>

=> dis cit, fd 11 1-5

1. 5,628,950, May 13, 1997, Method and apparatus for producing multilayer plastic articles; Walter J. Schrenk, et al., 264/241, 245 [IMAGE AVAILABLE]

US PAT NO: 5,628,950 [IMAGE AVAILABLE] L1: 1 of 5

DATE FILED: Sep. 30, 1994

2. 5,540,878, Jul. 30, 1996, Method for producing blow **molded** multilayer plastic articles; Walter J. Schrenk, et al., 264/513, 512; 425/523 [IMAGE AVAILABLE]

US PAT NO: 5,540,878 [IMAGE AVAILABLE] L1: 2 of 5

DATE FILED: Sep. 27, 1994

3. 5,380,479, Jan. 10, 1995, Method and apparatus for producing multilayer plastic articles; Walter J. Schrenk, et al., 264/241, 297.2, 328.12, 328.8, 513; 425/130 [IMAGE AVAILABLE]

US PAT NO: 5,380,479 [IMAGE AVAILABLE] L1: 3 of 5

DATE FILED: Nov. 9, 1992

4. 5,202,074, Apr. 13, 1993, Method for producing injection molded multilayer articles; Walter J. Schrenk, et al., 264/241, 245, 297.2, 328.12, 328.8, 513; 425/130 [IMAGE AVAILABLE]

US PAT NO: 5,202,074 [IMAGE AVAILABLE] L1: 4 of 5

DATE FILED: Apr. 11, 1991

5. 5,162,080, Nov. 10, 1992, Rotary flow control valve; Michael E. Drager, et al., 210/190; 137/625.29; 210/278 [IMAGE AVAILABLE]

US PAT NO: 5,162,080 [IMAGE AVAILABLE] L1: 5 of 5

DATE FILED: Oct. 16, 1991

=> dis hist

(FILE 'USPAT' ENTERED AT 15:20:40 ON 19 JUL 1998)

FILE 'USPAT' ENTERED AT 15:20:59 ON 19 JUL 1998